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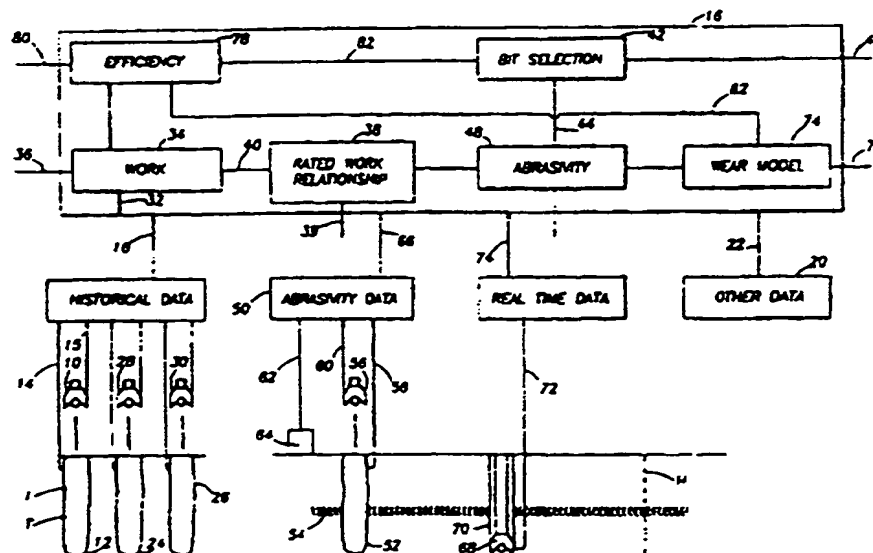
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(54) Abstract Title

Method of assaying downhole occurrences and conditions

(57) A method of assaying work of a bit (10) of a given size and design comprises the steps of drilling a hole with the bit (10) from an initial point (I) to a terminal point (T) and recording the distance between the initial and terminal points. Electrical incremental actual force signals (18) are generated, each corresponding to a force of the bit (10) over a respective increment of the distance between the initial and terminal points. Electrical incremental distance signals (14) are also generated, each corresponding to the length of the increment for a respective one of the incremental actual force signals (18). The incremental actual force signals and incremental distance signals are processed to produce a value corresponding to the total work done by the bit in drilling from the initial point to the terminal point. Using such a work assay, a number of other downhole occurrences and/or conditions can be assayed.



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